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ABSTRACT

Full reading comprehension is dependent on a knowledge of language usage, specifically, how syntactic constructions function in relation to pragmatic knowledge. To avoid some of the problems which might arise concerning the pragmatic aspects of reading comprehension, the following steps may be taken: teach children very early the relationship between reading and language usage; encourage children to expect books to match their knowledge of the real world; and reinforce these steps by having students collect folk tales and compile reading material from them, peruse comic books for illustrations of text, and act out scenes from books they read. (JM)

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EXTENDED NOTIONS OF GRAMMAR AND READING COMPREHENSION

Paper presented at IRA Pre-convention Workshop
on Syntax and Comprehension

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Center for Applied Linguistics

May, 1975

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Introduction

There are essentially three factors which have lead me to the position that I take here with respect to language use and reading comprehension. One of these comes from my developing homeowner's tribulations, one from my academic pursuits, and one from my peer relations. Without making a paper out of what led to this current position, let me simply give proper credit to these various sources.

As part of the society of Harry homeowners and the do-it-yourself generation, I have had the opportunity (obligation) to put together a number of pre-packaged toys and home appliances. Now this is certainly an economical move, given the state of the economy, but I would appreciate it a great deal more if I had some sort of natural or socialized realization of what I was doing to begin with. Presumably, however, there are simple directions that accompany these sorts of packages and these directions put everybody on the same level -- or do they? Last summer I decided to construct an outdoor shed. That seemed simple enough, even though there were seemingly a thousand screws and nuts. But there were directions, and even a few illustrations. All I had to do was follow the directions. After several hours of trying to follow directions while hiding my obvious confusion from neighbors in surrounding yards, one kind, if insulting neighbor came over and asked what I was doing. Perhaps I should tell you something about my neighbor. He is not a native speaker of English and he has only been in the United States several years. He never learned to read formally in English and he does not typically read as a leisure-time activity. But, he picked up the instructions (they were sitting on the ground where I could kneel down and pour over them), read through half of them, and proceeded to tell me how the shed should be constructed. He was very kind. He said nothing about my inability to comprehend the instructions or my academic background. Obviously, what had happened was he had applied a considerable amount of real-life knowledge to the instructions and therefore needed minimal information from the directions at hand. For him the directions were not the exclusive source for his notions of how to construct a shed. That incident, along with other failures running from directions which led me to dye some of the ugliest looking Easter Eggs in the world to the construction of some of the wierdest looking toys has led me to think of the relationship between reading comprehension and real-world knowledge.

The second factor which has led to my position comes from the emerging interest found in linguistics (since I am first a linguist who would be influenced more by developments in that field than developments in adjacent disciplines even though some of these developments have come from the impetus of other disciplines). There is an emerging interest within linguistics today in which facts of the real world, including the knowledge of how language is used in the real world, are seen to have an important relation to language. It has become obvious that the total communication event, whether it be in spoken or written language, leaves much unsaid -- it is implied by what is said and is filled in based on the background knowledge that an interlocutor or reader brings to the situation. Yet such information does not relate to the literal content of the grammatical structures, but the knowledge of how language is used in the real world. This developing interest in what has sometimes

been referred to as pragmatic aspects of language has now taken linguists past some of the restricted interest in overt grammatical form. The obvious relation of pragmatic aspects of language to reading comprehension, then, can profit from some of the more recent insights that have developed by this merging interest by some linguists. This is not to say that there has not been parallel development in the field of reading itself, as can be seen with the type of concern now shown for the nature of reading as a psycho-linguistic guessing game. That there are parallel developments just makes it that much easier.

Finally, there is a factor of peer relation which has influenced my position. At the International Reading Association Preconvention in 1974 an outstanding paper on pragmatic aspects of reading was given by a colleague of mine, Peg Griffin. It's one of those papers that I wish I had been ingenious enough to write myself. My dependence on this paper will be obvious to anyone who will eventually read the published version of her article. I shall try to give her proper credit for some of the ideas contained in this paper, for it was an inspirational factor in what is to be discussed here.

What is Pragmatics?

When we speak of pragmatic aspects of reading, we are referring to the use of real world facts as they relate to the ultimate goal of communication. It is essentially concerned with the broader role of context as related to the beliefs and attitude of communication, participants, status relationships of participants, and the purpose or intent of the communication involved. When we speak of pragmatic aspects of reading, we are concerned with the use of real world facts as they relate to the ultimate goal of comprehension. In reading, as in spoken language, there is much that is left unsaid -- it is implied by what is said and is to be filled in based on the background knowledge of the real world that the reader brings to the situation.

We can start off by defining several different notions that come into play with respect to what is left unsaid in the overt message of a conversation. One of these is presupposition, one entailment and one what we may refer to as a conversational implicature. A presupposition relation has been referred to as a relation between a language user and a sentence on the one hand, and between two sentences on the other. Formally, these can be defined in the following way:

(1) A presupposes B if and only if B is necessitated by both A and the negative of A.

Another way of putting this is that A presupposes B if B is true whether A is either true or false.

This becomes clearer by the way of illustration. Take sentences like:

(2) a. John's children are curly-headed.
b. Turn the oven on again.
c. The student borrowed a pencil from his friend.

Now in each of these sentences, there is a presupposition. In a sentence like (2a) it is presupposed that John has children. Even if it were a negative statement (i.e. John's children don't have curly hair) it would presuppose that John had children. In a similar way, the sentence (2b) presupposes that the oven had been turned on at some previous time. And in (2c) it is presupposed that the student's friend had a pencil at some previous point prior to the time of the borrowing.

Whereas a presupposition relation holds with both the positive and negative of A, and entailment relation between two sentences has been defined as follows:

(3) A entails B if and only if B is true whenever A is true.

Another way of saying this is that A entails B if the assignment of the value true with respect to A also gives a value of "True" to B. To illustrate, consider the following sentences:

(4) a. Andrea is married.
b. All of Walt's children have curly hair.
c. The fans pursuaded Hank Aaron to play another year.

In a sentence like (4a) there is an entailment that Andrea has a husband. Note here that the negative of this (Andrea didn't have a husband) would not entail Andrea's having a husband. We thus see that B is true only when A is true. Similarly, the use of all in sentence (4b) entails a relationship with some. If all of Walt's children have curly hair, then it is true that some of Walt's children also have curly hair. Likewise, sentence (4c) entails that Hank Aaron did, in fact, play another season. This particular entailment applies to verbs like cause, make, force, persuade and so forth.

Conversation implicatures refer to the fact that certain consequences (not presuppositions or entailments) can be drawn from the fact that a particular sentence has been uttered. It refers to language usage that is shaped by the realities of the large discourse context. Parenthetically, we should say here that "conversational" does not refer to spoken language as opposed to written, but can relate to any medium of communication, including, of course, writing and reading. While the exact type of information implied from a discourse may differ to a considerable extent, there are general principles and maxims which specifically shape the discourse. The philosopher H. P. Grice (1965) has set these forth most clearly, as follows:

The cooperative principle. The conversational contribution should follow the accepted principle of language exchange.

Maxims of quantity. The contribution should be as informative as required for the current purposes of the exchange, but not more information than required.

Maxims of quality. The contribution should be true, not saying that which you believe to be false or that which you lack adequate evidence.

Maxims of relation. The contribution should be relevant.

Maxims of manner. The contributions should be plain to the understanding, avoiding obscurity of expression, and ambiguity.

Now the principle and the maxims are necessary for language communication to take place successfully. Furthermore, these maxims are the basis for saying things in a variety of ways. For example, there are a number of ways in which a question can be asked or a command can be given apart from the literal formal grammatical descriptions for asking a question or giving a command. In addition to the formal imperative constructions such as Take out the garbage in giving a command, we may use a question such as Why don't you take out the garbage? or a statement of need such as I need the garbage taken out. Notice here that such statements, which may also have their literal meaning of question and assertion, when used in a particular situation in which the addressee has the capability of performing the task and the addresser the status relationship to make the request reasonable (e.g. a mother to a child), are not to be interpreted in a literal way, but according to understanding of language in terms of what is implied by the speaker/writer.

Now the point of the above remarks is that language usage involves considerably more than the particular form that a sentence takes. Furthermore, a speaker/hearer's competence in his language involves these aspects of language usage to a great extent. Likewise, such knowledge is required in comprehending a written passage, for writing/reading skills are subject to similar types of constraints. Part of comprehension, then, is understanding aspects of language usage in terms of its pragmatic functions. Consider, for example, the following passage, and its reliance upon conversational implicatures in comprehending what is taking place.

(5) Mother came into the room where Johnny and Sally were watching TV and said "Whose shoes are these in the middle of the floor?" Johnny looked up and said "They're not mine." Sally just sat there and watched TV. Mother spoke louder, "Who's shoes are these in the middle of the floor, Sally?" Sally picked up her shoes and took them upstairs to her room.

There are several important aspects of comprehending what is taking place in the above passage. To begin with, we see a sentence with a wh word actually functioning as a command. The way in which it functions as a command, however, is the result of several other bits of information we get from the passage. The mother, for example, is in a proper status relationship to use this form of command. In this context, the chances of a mother not knowing the identity of a pair of shoes (one a girl and one a boy) are rather doubtful. The children, on the other hand, react behaviorally in a way which demonstrates that they fully understand the function of the non-literal interpretation of the wh-question. What Johnny is actually saying with his reply "They're not mine"

is that he is absolved of responsibility for doing something about the situation regarding the shoes standing in the middle of the floor. And note that Sally follows out the implied instructions found in the second utterance by the mother. In fact, an attempt to answer such an utterance with a form such as, "They're mine." while Sally remained sitting and watching TV would probably have been interpreted as completely inappropriate for this context.

It is quite obvious that speakers/hearers of a language use their knowledge of language in the context of the real world as the basis for a considerable amount of their ultimate understanding or oral messages. In order to comprehend written language and understand what a writer intends to say, the same relationship must hold. Now this can cause problems for a number of reasons, including differing relations to the real world by the writer and reader, differing uses of language functions, or simply problems by the reader in applying the same principles that he would ordinarily apply to the oral language exchange.

One type of problem which can occur with a reader is what Griffin (1974) has called the "gap". The gap is a result of the failure to apply in reading the principles they would apply when talking. It may be possible for a reader to know particular facts about language usage, but simply not apply them when it comes to reading. This seems to be a particular problem for beginning readers and one which can hold well into the middle ranges of reading ability. The recognition of this potential gap, in fact, seems to be one of the reasons that "reading with expression" becomes an essential goal at one stage in the teaching of reading. As it turns out, "reading with expression" may give an instructor a clue as to whether a child is comprehending the intent of the passage beyond the literal decoding or individual items in the various sentences which comprise the reading. If readers do not see a relationship between language usage in speech and in reading passages they will encounter problems. Griffin gives several interesting examples of how language usage comes into play with reading ability. One is the case of a word like <u>bet</u>. The item <u>bet</u> in certain contexts can be used as part of a class of words whose utterance is the act -- the so-called "performative verbs". That is the utterance <u>I bet you</u> can serve to accomplish an agreement to bet, among other things. It is "the among other things" that becomes the focal point in terms of language function. For example, in an exchange such as:

(6) "I bet you five dollars I can climb that pole."
"I bet you can."

(From Griffin 1974:16)

In the first utterance, the use of <u>bet</u> can function to make an agreement to wager. If the negative had been placed on <u>can</u> in the response, the speakers would have been committed to bet, but the response leaves this open and one must read further on to see if the bet was taken up or not. A reader who does not look at the relationship between the language interchange of the two utterances may be confused. If they are decoded as separate entities, he might be led to believe that a wager has actually been made. It is essential, then, that one understands which goes on when talking and a comparable situation in reading.

There are several different types of reasons why gaps may actually occur. For one, the traditional emphasis on decoding linguistic forms as opposed to language uses may bias a reader in the early stages in favor of linguistic form rather than language function. The approach in which the whole of a reading passage is viewed as a summation of the various formal parts may prejudice a reader against looking for the significance of the total communication event. This observation may, of course, be interpreted as an endorsement for viewing the reading process theoretically and practically as a "psycholinguistic guessing game" (cf. Goodman 1968; Smith 1971). And there has been a concern for the systematic introduction of the formal aspects of language in reading (e.g. restrictions as to the number of new words on a page, syntactic constructions, etc.) as opposed to the lack of attention for details of language function in reading material. This emphasis on the literalness of comprehension and concern for systematic structure of linguistic forms may actually work against the reader who wants to use his real world knowledge concerning language use in reading. Consider, for example, the following passage, involving a father who comes home from work and greets his children who have been painting chairs:

(7) "Can you guess, Father?" said Tom.
"What color is my chair?"
Father said, "I can guess.
I can guess the colors.
I can see some red paint on Tom.
Tom has a red chair."

The father is obviously being told to guess through the question offered by Tom, and an initial interpretation as a capability in guessing before offering a guess seems to be either inappropriate language usage or a deliberate type of teasing activity by a parent. Chances are, a real life situation of this sort would have ended up with a direct imperative (e.g. "Guess which one", "Guess which one!") by the time the father was half way through his declaration of capability in guessing. While this passage may have been structured to allow for repetition of lexical items in particular syntactic frames, it may have violated the principle of cooperation in language exchange.

In addition, the slow, often stalling type of reading that takes place in the initial stages of reading may cloud the reader from seeing the overall picture of the communicative event. Smith notes:

> Material which is read slowly is much more difficult to comprehend... In other words, unless the reader reads fast enough, that is, around 200 w.p.m. or more, he is not going to comprehend what he is reading simply because his memory system will not be able to retain, organize, and store the fragmentary information in any efficient way.
>
> (Smith 1973:64-65)

If the effect of the slowered rate will have this sort of effect on the literal aspects of comprehension, we can surely expect that the effect will be even more exaggerated with respect to the non-literal or pragmatic aspects of the communication event.

In the preceding paragraphs we have just spoken of the cases where there is a gap between the application of knowledge about language usage from real life to reading. These are the cases where an individual knows appropriate language usage outside of reading but fails to apply it to reading. There are, however, also cases where there is not simply a gap in application, but a conflict between real world knowledge about language usage and that assumed in reading material. These are the cases which Griffin has labeled "conflict". Actually, some of the cases we discussed above, such as the father's response to his son's imperative through a question form may be more of a conflict problem than a gap problem.

Conflicts can arise for a number of reasons. One reason relates to the acquisition of language usage functions found among children. There are stages in the acquisition of language functions just as there are in the acquisition of grammatical forms. Unfortunately, however, our knowledge of grammatical form acquisition is considerably ahead of our knowledge of language function acquisition. But just as reading material should not exceed the acquisitional expectation of the age level for which it is designed in grammatical form and complexity, the same principle should hold with respect to language functions. The failure to be cognizant of differences of this sort can create a serious conflict.

As an illustration of the differing roles of language usage with respect to real world knowledge, let me simply cite a recent study that I completed with respect to the function of "how come" questions (Wolfram 1974). What I did in this study was ask, as a part of a normal conversational frame, how old a person was, and, after responding with their age, follow this up with a "how come" question. What I was interested in was how children and adults might react to such a question. The upshot of this study was an important difference in how adults and children perceived such a question. Adults indicated that they did not consider the question a sincere request concerning the basis of a person's age, and typically responded with the following sorts of replies:

(8) FW: How old are you?
INF: Twenty-six.
FW: How come?
INF: (laughter) I don't know.

FW: How old are you?
INF: Twenty-nine.
FW: How come?
INF: (laughter) I don't know, how old should I be?

That the adults failed to interpret it as a sincere request for information, I believe, was due to the fact that it requested information that was considered to be part of their background knowledge of the real world. It was

simply inappropriate to be asking for such obvious information. (It was most often interpreted as a type of joking behavior playing on the notion of obvious information since it violated a felicity condition for questions.) Children, however, typically responded to this question as a sincere request for information, answering with a criterion-based response, such as the following:

(9) FW: How old are you?
INF: Five.
FW: How come?
INF: Cause I had five birthdays.

FW: How old are you?
INF: Six.
FW: How come?
INF: Cause I'm in kindergarten.

The important point here is that these children had not sorted out what is considered obvious information in our culture and therefore inappropriate to question. While this is just a small instance of differing relations to the real world and what is open to questioning, the implications of this illustrative case should be clear. It is essential to find out where children are at in terms of their real world knowledge and language usage if we are to avoid conflicts between the language functions assumed in reading material and the language functions they have acquired.

Take an illustration of a reading passage where the particular function of a reading passage is questionable in terms of its assumption of language function on the part of a beginning reader.

(10) But he made a soft shuffle-shuffle with his foot and said in a little voice, "I will climb the tree". "Climb the tree?", shouted the big animals. "Yes", said Little Bear softly, "I know how to climb a tree."

What we have here is an assertion that Little Bear will climb a tree, which presumes his capability in performing this act. His capability in performing such an act is questioned by those present at the occasion. Note, however, how this is done -- through the use of "echoic" question "Climb the tree?" While this is certainly one of the ways in which this disbelief can be manifested in adult language functions, there is some reason to ask whether a first grade student reading this passage has actually mastered this particular function of questions. In my experience with children, I would expect them to question Little Bear's capability through the use of a direct negative claim such as "You can't climb that tree" or "No you can't". A child who has not acquired a particular functional usage of echoic questions of this type can not be expected to comprehend fully the significance of the exchange that is taking place.

While children at this age level may not appear to use echoic questions with this particular language function, there are other types of language

pragmatics that they appear to understand and use quite freely. Thus, it seems that children of this age would understand the request given as a question in some types of situations, such as a "Can you pass the salt?" A six year old who says yes and continues to eat his dinner without passing the salt would probably be considered as either joking or ill-mannered. In this regard, it is interesting to observe that the passage given in (7) contains the opposite sort of problem -- that is, it denies a particular language usage which it may assume on the part of most six and seven year old's language usage competency. There is, of course, much we do not know about the subtleties of language usage and its acquisition by children, but we should have emerging research in this area soon. Just as we would make the case that formal grammatical structures not part of a child's formal language competence would complicate reading comprehension, we would make the same claim with respect to language function.

Another area of potential conflict may come from differing cultural traditions and their relation to language functions. This type of potential conflict can best be illustrated by a passage, again taken from Griffin:

> (11) The waiter brought the steaks. Nick and John cut into them. "This is just right," John said. "It's rare but not too rare." The waiter walked by. Nick got his attention and asked for a glass of water. "What's the matter, Nick? You can send it back, you know, order something else." "No." "Oh. Well, I don't have to finish this. You want to leave now, huh?" "Yeah, yeah, I do."
>
> (from Griffin 1974.5)

The question that arises from this passage is why John's question to Nick follows from Nick's request for a glass of water. The important aspect of the passage, however, derives from the fact that the example comes from a story written by a Philippino and that one does not ask for water before or during a meal in the Philippines. In the context of this social occasion, a request for a glass of water implies that the individual making the request is not going to eat any more. At the point of differing real life behavior, the interaction of language functions with this behavior may cause a serious conflict in terms of comprehending the passage.

All conflicts of this sort are not related to clear-cut cultural differences such as those cited above. Some may be a product of the stylistic changes which have traditionally been utilized in reading style as opposed to spoken language style. As Griffin has pointed out, it is insufficient to say that books simply use a more formal style of language than is found in everyday conversation. She correctly observes that different styles of language correlate with aspects of the situation, including the participants, the types of things talked about, and the setting in which they take place. Griffin notes:

> Many books for children purposefully use situations that mirror those that the children experience in their everyday life -- situations which do not call for this more formal style of language. The children are asked on the one hand to relate the story to their everyday life and yet on the other hand to a very rare and special style.
>
> (Griffin 1974:19)

To those who have any familiarity with the Dick and Jane type stories, there is no need to illustrate the sort of incongruity. It is enough to listen to children who are told to read such stories "with expression". Unfortunately, there's no way to read such stories real to life for the conflict with real life is inherent in the style of the passage. In effect, reading materials may be quite uncooperative in terms of a language user applying his pragmatic knowledge to reading. This type of conflict, while not as obvious initially as those relating to cultural differences, may, in fact, end up a more frequent and persistent obstacle to the comprehension of pragmatic aspects of reading comprehension than the more obvious types.

Conclusion

What I have maintained in the preceding discussion is that any understanding of the relationship of comprehension to grammar must go beyond the scope of the traditional limitations of syntax. What must be a part of this extended notion of grammar is the aspect of grammar which ultimately relates to real world knowledge in terms of language usage. We have seen that the pragmatic aspects of language must take into account more than the form of the syntactic constructions. Their function in terms of how language is used must be an integral part of any complete consideration of comprehension. A framework which does not consider this aspect will be incomplete, just as any description of syntactic form not considering these aspects will not be complete. Language usage is an essential aspect of understanding the total communication event.

Given what we have said about some of the problems that may arise relating to the pragmatic aspects of reading comprehension, it may be asked what types of steps can be taken to ensure that these aspects will not interfere with total comprehension. There is certainly no full-proof method for dealing with such matters, but several types of suggestions do seem appropriate.

To begin with, children should learn very early what the relationship between reading and language usage might be. Working on this relationship should start early, even before "decoding skills" are acquired. Children should be encouraged to pick up books, thumb through them and make up real life stories that make sense. Too often, children are stifled at this point as they are told, "You know you're not reading, you're just making that up!" But children should be encouraged to expect books to match their knowledge of the real world, and this is one way of doing it. They should get the idea that what they read is supposed to make sense in terms of their real world experience, including how they use language. The earlier children can learn this, the better off they will be.

This should be followed in the early stages of reading by considerable reinforcement of this idea. One way of doing this is, of course, language experience techniques. Language experience however, need not be a techniq- restricted to the incipient stages of reading. Middle ability readers may also have problems with the pragmatic aspects language in reading, and a more extended version of language experience may be used with them (cf. Griffin 1974). Some rather successful techniques in this regard have been reported by Wigginton, in his compilation of the Foxfire books and journal. Older students may go out, collect stories of indigenous folklore and compile reading material from this. In addition to collecting valuable folklore, students may be encouraged to see the relationship between how language is used in real life and reading.

Considerable reinforcement can also be given through illustrative material where many real life pictures accompany the dialogue. The usefulness of comic books or some variation thereof has already been suggested by others as a useful reading material at certain stages, so we may simply add here that comic books hold the added potential for presenting language usage.

Finally, reinforcement may come from acting out book scenes of one type or another. I have never considered myself to be an avid reader of plays, due to the fact that I felt that I never understood what was taking place in the various scenes. But I do recall very vividly my 10th grade experience with Shakespeare. It was absolutely horrible; I didn't really know what was going on -- until we got a chance to act out various scenes. When we finished acting out parts of it, I went back to the play and understood what was actually taking place in the language exchanges. The assistance of the acting and the classic comic book saved me.

The whole role of comprehension and the testing of comprehension must be reopened with respect to the types of language pragmatics currently being investigated. Systematic attempts must be made to ascertain to what extent the language uses are being comprehended, by systematically testing various types of things unstated but implied in the reading material. The key word here is systematic. We all know that there are many aspects of comprehension testing which do, in fact, ask for such information, but it is typically done in a haphazard way. Such information must be systematically incorporated, with the designer fully knowing what he is after. For example, we need to know what types of conversational implicatures are comprehended and those that are not. And, in this regard, we want to examine what may have led to a particular "wrong" answer. This sort of information may be extremely important, for it may not only tell us where the students are with respect to language functions, but indirectly tell us where the reading materials have gone off in their representation of language and pragmatics.

REFERENCES

Goodman, Kenneth S. ed. 1968. The Psycholinguistic Nature of the Reading Process. Detroit; Wayne State University

Grice, H. Paul. 1967. "Logic and Conversation" Lecture Notes from William James Lectures, Harvard University.

Griffin, Peg. 1974. "Pragmatic Problems in Reading" Paper Presented at I.R.A. Preconvention Workshop on Linguistics and Reading: Theory into Practice. New Orleans.

Smith, Frank. 1971. Understanding Reading: A Psycholinguistic Analysis of Reading and Learning to Read. Toronto: Holt, Rinehart & Winston.

Smith, Frank. ed. 1973. Psycholinguistics and Reading. Toronto. Holt, Rinehart & Winston.

Wolfram, Walt. 1974. "How come you asked how come?" Paper presented at New Ways of Analyzing Variation in English III. Georgetown University